

Corpus Analysis Of War Metaphor To World Health Organisation Press Briefing Transcripts

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Abstract

Since Covid-19 Pandemic, World Health Organization (WHO) conducts regular press briefs to provide the development of various aspects of the pandemic. During the press brief, the use of war terms is pervasive, both in literal context and in metaphorical use. This study investigates the use of war terms metaphor in the press briefing of WHO on Covid-19 development from February 4 2020 to August 31, 2020. The aim is to identify the peak of its use and what it implied in comparison with the context of case development. Corpus analysis is conducted to seventy-eight transcripts of WHO press briefing and the data concordance is conducted using Antconc concordance software. The Conceptual Metaphor Theory of Lakoff and Johnson is used as the theoretical framework. The result shows that the peak of the war metaphor usage is in March 2020. Even though the case is increasing after March but the use of war metaphor keeps declining in the following months which suggests the shifting of the focus of communication as more has been known about the virus. Furthermore, the data shows that WHO is not only fighting the virus of Covid-19 itself, but also the infodemic and fake news at the early stage of the spread.

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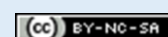
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Corpus Analysis Of War Metaphor To *World Health Organisation* Press Briefing Transcripts

Introduction

The use of war metaphor during a pandemic is inevitable, as it describes the sense of fear and panic. Rosenberg (1989) asserts that once the public has learned the appearance of an epidemic, the response is most widespread and drastic and results in a collective panic. Furthermore, Ventriglio et al. (2020) agrees the potential first stage of response to the pandemic at a personal level is fear that something is happening but there is not enough knowledge about it, whereas Ozamiz-Etxebarria, Dosil-Santamaria, Picaza-Gorrochategui, & Idoiaga-Mondragon (2020) affirm that in any biological catastrophe, fear, uncertainty, and stigmatization are common. In the stages of epidemic psychology as asserted by Strong (1990) there are three stages during an epidemic; they are fear/suspicion, explanation, and action, or proposed action. He further adds that each stage is possible to affect almost everyone.

The use of particular metaphor in the first stage of an epidemic is pervasive, although there have been many discussions on the appropriateness of war metaphor describing pandemic (Hagstrom, 2020; Musu, 2020; Ranjan, 2020; Serhan, 2020; Wilkinson, 2020). Nevertheless, the use of war metaphor is unavoidable as it can deliver a critical tone and boost action (Flusberg, Matlock, & Thibodeau, 2018), they further assert that wars implied sense of risk and urgency. Furthermore, Rajandran (2020) agrees that there are several aspects that can be inferred from war metaphors from the virus itself, its description, its impact, and people involved along with their reactions.

The urgency and the need to take action are important during the first stage of the appearance of this unprecedented event. Since the Covid-19 spread was acknowledged, World Health Organization (WHO) conducted regular press briefing to report the development of the Covid-19 pandemic. During the press brief, the use of metaphorical expressions is of course inevitable. The use of war terms such as enemy, combat, battle, fight, etc is found which is not only talks about the Covid-19 itself, but also the literal war which relates to Covid-19 curb efforts.

There have been various studies that focus on the Covid-19 discourse, from corpus-driven approach (Fariza, Nor, & Zulcafli, 2020; Joharry, Alam, Turiman, & Alam, 2020; Rafi, 2020); to the specific use of metaphor about Covid-19 (Craig, 2020; Leo & David, 2020; Marron, Dizon, Symington, Thompson, & Rosenberg, 2020; Pfrimer & Barbosa Jr, 2020; Rahman, 2020; Rajandran, 2020; Semino, 2020) and the use of Euphemism and Dysphemism of Covid-19 (Olimat, 2020). Those studies provide various perspectives on the linguistics aspect of Covid-19 communication and media reports. This current study aims to examine diachronically the use of war metaphor and relate that with the spread rate of the case and the first stage of epidemic psychology. As far as authors' knowledge, there hasn't been any previous study that uses the WHO transcripts as the data source and relates the war metaphor with the stages of epidemic psychology.

This study aims to examine the use of metaphor from the WHO transcript within the particular period from February 2020 to August 2020 to provide a view on the first stage of epidemic implied from the metaphorical use of war terms. This is important, to see how the message is delivered from the global health authority, as WHO is the "control room" and the center of all information during the pandemic. Thus, the goal of this study is to investigate whether the use of war metaphor in the press briefing of WHO can be said as the implicit proof of the stage of fear in epidemic psychology.

The study of the use of metaphor in various discourses has been widely extensive since the emergence of Conceptual Metaphor Theory (CMT) that view metaphor as a cognitive process and speak about an abstract concept (target domain) with a more concrete concept (source domain) (Lakoff, G, and Johnson, 2003). The similarity of elements between a source domain with a target domain enables both concepts to be used in analogical relations. The schematic concept with universal elements and experiences such as war is frequently used in metaphor as the source domain and is used to speak about an abstract concept (Kovecses, 2010). Baker (2006) agrees that metaphors are a particularly revealing way of helping to reveal discourses around a subject.

Mapping source to target domain results in conceptual metaphors like Covid-19 which are understood as an enemy, thus the efforts to curb the pandemic are described as a war. The use of metaphor in discourse itself it's a part of an important element. The studies of the use of war metaphor to speak about pandemic have been conducted by previous metaphor researchers; among them is the study by Trčková (2015) on the use of metaphor in two American newspapers to refer to Ebola and its victims are revealed that both newspapers heavily rely on a single conceptual metaphor of Ebola As War, whereas Nie et al. (2016) reports the use of military metaphor in AIDS and HIV cure research. According to (Petsko, 2001), the language of war can trigger people's awareness of the threat that comes from diseases that may threaten public health.

Corpus linguistics is "the study of language based on examples of real-life language use (McEnery & Wilson, 1996). The use of corpus in the linguistics area has been extensive. In the area of conceptual metaphor and has been highlighted by many metaphor scholars (Cameron & Deignan, 2006; Pérez-Sobrino, 2016; Silvestre-López, 2020). One of the aspects highlighted is the benefit of corpus linguistics use in metaphor studies since it enables the researcher to search for large text corpora. Sardinha (2011) highlights four inter-related aspects in corpus linguistics research of metaphor, i.e; the pattern of linguistic metaphor revealed by corpus analysis; metaphor probabilities, dimensions of metaphor variation; and automated metaphor retrieval. Whereas in particular to Covid-19 discourse, Samsi, Y. S., Lukmana, I., & Sudana (2021) examines language evaluation of vaccination of covid-19 news of post-pandemic era in the corpus of the Jakarta post using Antconc Concordance Software.

The concordance search in corpus metaphor research can be conducted within few distinct types according to Stefanowitsch (2006) they are manual, source domain vocabulary, target domain vocabulary, both source and target domains, metaphor markers, and extraction from corpora annotated for semantic fields or conceptual mappings.

Hart (2010) asserts that metaphor can be viewed as a cognitive tool to conceptualize subjective experiences and vague social situations, it triggers emotions and bridges the gap between logic and emotions. Whereas Nguyen & McCallum (2015) agree that metaphors can contribute to the discursive construction of important political and social issues. Therefore, the current study seeks to reveal the pattern of the war metaphor used during the pandemic particularly on the first stage of pandemic. Charteris-Black (2004) introduces three steps in Critical Metaphor Analysis (CMA) which are metaphor identification; metaphor interpretation and metaphor explanation.

Method

This study is quantitative and qualitative at the later stage, as affirmed by Biber, Conrad, & Reppen (1998) that corpus-based research depends on both qualitative and quantitative and further states that association patterns represent quantitative relation, measuring the extent to which features and variants are associated with contextual factors. Data collection of corpora is conducted with Antconc concordance tools version 3.5.8 (Anthony, 2019). This software is chosen as it is readily available for free installations. The quantitative analysis is conducted to analyze the use of war metaphor-based. Whereas qualitative analysis is conducted after, Baker (2006) asserts that qualitative interpretation is essential in any corpus-based analysis.

Data Corpora

The corpora used in this study is taken is the transcripts from the WHO press conference that are available for download <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/media-resources/press-briefings>. The first transcript was from February 4, 2020, this is chosen as the start month of data collecting as, during January, there hasn't been any regular press brief on Covid-19, whereas the last transcript is from August 31, 2020. There are in total eighty-seven transcripts that were downloaded from official WHO websites. The number of word tokens is 700769 words. The detail is presented in table 1 below.

TABLE 1. Number of Transcript and Words

Month	Number of Transcript	Number of Words
February	19	130353
March	14	109666
April	12	103850
May	12	109561
June	12	96667
July	9	72847
August	8	69280
Total	86	692224

It can be seen that the highest number of transcripts is from February 2020, the month when the disease began to be widely acknowledged with 130353 words.

Corpus Concordance Procedures

The following stages are conducted to be able to meet this study:

First, since all the downloaded transcripts are in PDF format, then they must be converted to txt format to be able to be analyzed in Antconc. Antfile conversion software is used at this stage.

After all the files have been converted into txt files, they are distributed on each folder and is named based on the month. This is done to ease the data concordance process.

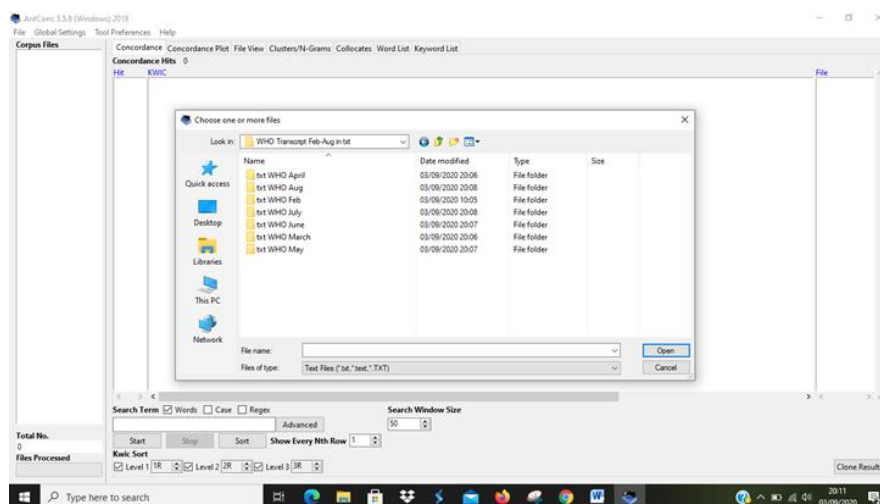


Figure 1. The folder of the corpus database

The second stage is to run the concordance to collect the war terms words. There are ten words that is searched, they are war, enemy, fight, fighting, fought, combat, combatting, win, winning, won, battle, battling, defeat, defeated, defeating, attack, attacking, attack. At the same time, the data collected from concordance is displayed by each word by each month on the separate sheet.

The third stage is to manually identify for metaphorical or non-metaphorical usage of the words, this is to confirm that the war terms that are used in literal context will be left out. Charteris-Black's (2004) approach to metaphor identification suggests a close reading of a small sample of text with the aim of finding metaphor candidates. These terms are then measured against specific criteria used to define metaphor, specifically "the

presence of incongruity or semantic tension – either at linguistic, pragmatic, or cognitive levels “ (Charteris-Black 2004: 35). The last stage is the metaphor explanation and interpretation to conduct analysis to show the relationship with the quantitative finding of the metaphor and the context development of the case.

Results and Discussion

The findings and discussion are presented in two stages, the first is the presentation of the quantitative analysis of the corpus in concordance, whereas the qualitative explanation and interpretation are presented at the later sub-section.

The Frequency Of War Related Words and War Metaphor

The data concordance to WAR terms shows the total word-tokens are 585, with the highest in April with a total of 145 war-related word-tokens. As for the individual word, “fight” is the highest with 234 word-tokens, and again in April is the highest. After the month of April, the numbers keep declining. The detail of the result is presented in table 2.

Table 2. The number of hits of War terms in concordance

	Feb	Mar	Apr	May	Jun	Jul	Aug	Total
War	9	1	15	5	1	3	0	34
Enemy	20	18	16	5	2	3	4	68
Fight	24	61	63	31	30	15	10	234
Fighting	12	14	21	10	10	6	2	75
Fought	0	2	1	1	4	0	0	8
Combat	1	1	1	3	0	1	1	8
Combatting	2	2	0	0	0	0	0	4
Win	1	9	3	7	1	1	0	22
Winning	0	0	0	1	1	0	1	3
Won	0	1	0	2	0	0	0	3
Battle	0	3	1	6	0	2	1	13
Battling	4	0	0	0	0	0	0	4
Defeat	7	3	11	6	4	5	1	37
Defeated	1	2	2	1	1	1	1	9
Defeating	0	2	0	1	0	0	0	3
Attack	12	18	8	9	4	0	1	52
Attacking	1	0	0	1	0	0	0	2
Attacked	1	1	3	1	0	0	0	6
	95	138	145	90	58	37	22	585

The data in Table 2 are the combination of the metaphorical and non-metaphorical use of war-related terms, and from 585 war terms, not all of them are metaphorical. Manual identification of metaphor is conducted. From the identification, there are 26 non-metaphorical use and 559 metaphorical use as seen in table 3 below:

Table 3. *The Metaphorical and Non-Metaphorical Comparison.*

<i>War Terms</i>	<i>Metaphorical</i>	<i>Non-Metaphorical</i>
585	559	26

After the identification of metaphorical vs non-metaphorical war terms that is conducted manually, the use of the WAR metaphor has reached its peak in March 2020.

Table 4. *The Detail of War Metaphor.*

	Feb	Mar	Apr	May	Jun	Jul	Aug	Total
War	9	0	0	2	1	3	0	15
Enemy	20	18	16	5	2	3	4	68
Fight	24	61	63	31	30	15	10	234
Fighting	12	14	20	10	10	6	2	74
Fought	0	2	1	1	4	0	0	8
Combat	1	1	1	3	0	1	1	8
Combatting	2	2	0	0	0	0	0	4
Win	1	8	3	7	1	1	0	21
Winning	0	0	0	0	1	0	1	2
Won	0	1	0	2	0	0	0	3
Battle	0	3	1	6	0	2	1	13
Battling	4	0	0	0	0	0	0	4
Defeat	7	3	11	6	4	5	1	37
Defeated	1	2	2	1	1	1	1	9
Defeating	0	2	0	1	0	0	0	3
Attack	12	18	6	8	4	0	1	49
Attacking	1	0	0	1	0	0	0	2
Attacked	1	1	2	1	0	0	0	5
	95	136	126	85	58	37	22	559

Even though the highest number of transcripts and words is in February, it does not appear the highest use of war metaphor. Based on the presentation of war metaphor to the number of word tokens, March still has the highest percentage with 0,124% as seen in table 5 below:

Table 5. *The Percentage of war metaphor*

Month	Number of Transcript	Word Tokens	Number of War Metaphors	Percentage
Feb	19	130353	95	0,073%
Mar	14	109666	136	0,124%

Month	Number of Transcript	Word Tokens	Number of War Metaphors	Percentage
Apr	12	103850	126	0,121%
May	12	109561	85	0,078%
Jun	12	96667	58	0,060%
Jul	9	72847	37	0,051%
Aug	8	69280	22	0,032%
Total	86	692224	559	0,081%

The peak of the war metaphor to speak about Covid-19 during the WHO press brief was in March with 136 metaphorical expressions, after March, the use of War metaphor is declining. According to Strong (1990), there are three stages during an epidemic; they are fear/suspicion, explanation, and action, or proposed action, at the first stage is fear and panic, and marked by the use of military and war metaphors. February, March, and April are the first three months where the epidemic spread around the world. Thus, it implied the first stage from Strong's epidemic psychology.

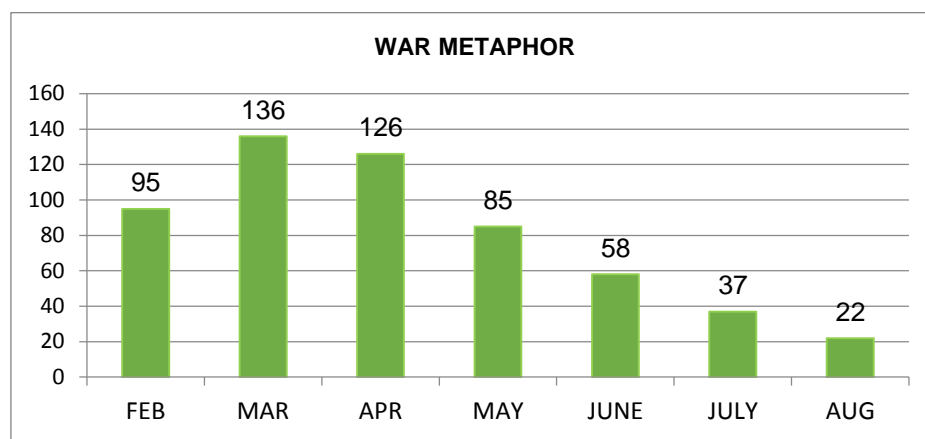


FIGURE 4. The Highest Use of War Metaphor

March 2020 shows the highest use of war metaphor, with 136 metaphorical expressions. This month also, during Press Briefing on March 11, The WHO Director General Tedros Adhanom declared Covid-19 as a pandemic.

Based on the quantitative analysis of the number of war metaphors used, the peak of use is at the same month as the increasing number of Covid-19 cases. It shows that the war metaphor implicitly delivers a high sense of the crisis. From <https://www.worldometers.info/coronavirus/worldwide-graphs/#case-timeline> accessed on September 24, the February 29 new cases were recorded 2,219, whereas on March 31, the new cases were recorded at 70,928 cases, and it keeps increasing from March.

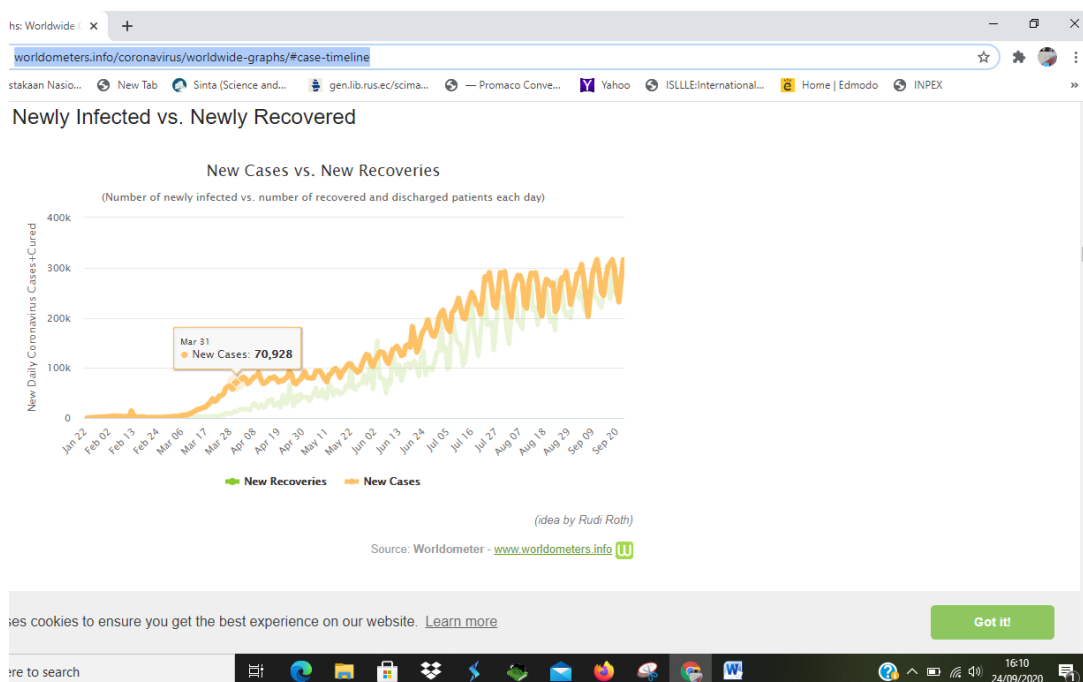
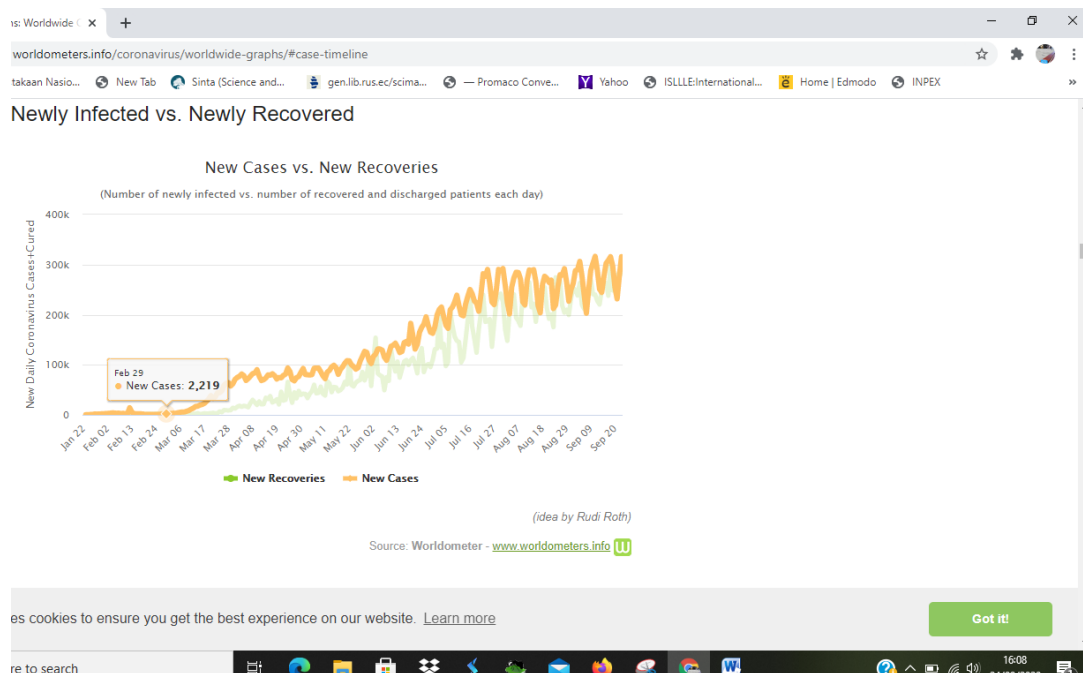


FIGURE 5. The screenshot of data dashboard From <https://www.worldometers.info/coronavirus/worldwide-graphs/#case-timeline> of February 29 to March 31 new cases comparison

It shows that the decline of the metaphorical use does not mean the decline of the case, but the potential shifting of the focus of communication which will be addressed in the last sub-section.

The Literal and The Metaphorical Use of War Terms

During the press briefing as seen from the transcripts, the use of war-related terms is of course not only in metaphorical expressions but also in literal context in which WHO describes the challenge on curbing the spread of the virus in the particular conflict regions. It describes how the WHO workers have to conduct their job in the middle of a war when at the same time the workers also need to fight the pandemic. The literal use of war terms is seen from excerpts below:

Transcript March 11:

*"Teams in Congo were chasing 25,000 contacts a day in the middle **of a shooting war and doing it every day under fire**"*

As early as March 11 transcripts, it has been described the challenges faced by the team in Congo in conducting contact tracing and the literal use of war to describe the challenging condition.

Transcript April 22:

*His name is Win Maung. He was collecting samples for COVID-19 actually; they were travelling to collect COVID-19 samples **when they were attacked and one of them wounded and the other one killed.***

Transcript July 20:

*If we can do this in a remote part of Congo, **if we can do this in the middle of a war zone** in North Kivu we can do this for COVID-19*

The excerpts from the transcripts above describe explicitly the real war that WHO workers have to deal with, especially in the conflict area.

At the early stage of the appearance of the virus, little is known and around that time, the metaphorical image of fighting with an unknown enemy is frequent, as seen in excerpts below:

Transcript Feb 6.

*"We have no vaccine to prevent infections and no therapeutics to treat them. To put it bluntly, we're shadow boxing. ... **We need to bring this virus out into the light, so we can attack it properly**"*

The metaphor above is not only statement about the virus as the enemy that needs to be attacked but also the mapping of SEEING is UNDERSTANDING conceptual metaphor is linguistically realized to speak about the virus which then at that stage there was little knowledge and understanding of it.

The effort to find more information about the virus is described as "huge fog in a war" as seen in the transcript from Feb 25 below:

Transcript Feb 25

*"Again, you're at war here and there's **a huge fog in any war**. You're trying to find those little bits of information that can add up and give you some confidence in what you're saying.."*

The metaphor above also the linguistics realization of a conceptual metaphor of SEEING is UNDERSTANDING, that a blur vision to the object, give limited understanding. Both of those use above are transcripts from early February shows the uncertainty of what WHO are dealing with. In this case, it is described as the unknown enemy

As March ends, more pieces of information have been known about the virus, which means that the enemy has been identified and the strategy and tactics have been set. Thus, as in war, the fight against the virus relates the process of Covid-19 protocols for the case is described as a war strategy and tactics.

Transcript Mar 23

"To win we need to attack the virus with aggressive and targeted tactics, testing every suspected case, isolating and caring for every confirmed case and tracing and quarantining every close contact."

Once the virus has been identified and has been declared a pandemic, more has been known, thus, there have been strategies identified to be able to handle the disease and take action to prevent the spread. From this stage, the use of the WAR metaphor is increasingly pervasive.

There are various WAR terms that are used in the metaphor to describe the action taken to prevent the spread of the disease as seen below:

Transcript April 8

*WHO wants this more than any organisation because we want to learn from our mistakes, from our strengths and move forward. **But for now the focus should be on fighting this virus.** As I said earlier, this is a new virus. There are many unknowns still*

Transcript May 13

*Maybe I can add on this that while dengue, chikungunya and COVID-19 are very different diseases and have different pathways by which they're caused they're very much fused in one way and that is **that they can attack vulnerable communities...***

The terms used such as fighting the virus, they can attack vulnerable communities, and also as seen below, "a battle that we must win" express the beliefs and attitudes towards the sense of urgency in fighting the pandemic.

Transcript 25 May

*I've been speaking for the entire day at the AU and advocating for the need to enforce public health measures and other critical activities that will allow us **to win this battle against COVID-19 on the continent, a battle that we must win to survive**, for our own existence as a continent.*

The extensive use of WAR metaphor to describe the disease, and the description of the action as if the people are in actual war

The Other Enemy: Infodemics. Misinformation And Stigma

Covid-19 seems to be not the only enemy that was described using war metaphor. There are other aspects that are still related to the Covid-19 fight that is also frequently described as an enemy to fight together. Rumors, misinformation, and infodemic have also become an unseen enemy in fighting the virus. In MacMillan Dictionary (n.d.) infodemic is "an excessive amount of information about a problem, which is sometimes incorrect and can harm finding a solution".

Table 5 below illustrates the concordance hits of the word infodemic(s), misinformation, and fake news found from the transcripts.

Table 5. Number of Concordance Hits.

<i>Infodemic(s)</i>	24
<i>Misinformation</i>	60
<i>Rumours</i>	22
<i>Fake News</i>	6
	112

Same with describing the Covid-19 as the enemy of war, rumours, misinformation, and epidemic are also described as enemies to fight and use various war terms such as to fight against, battling, and fighting.

Transcript February 7

*We know that the WHO has right now reiterated again and again its determination **to fight against the spread of the rumours and misinformation**, against the so-called information epidemic, as you call it so that's also the reason why we are here today.*

Transcript February 08

*At WHO, **we're not just battling the virus, we're also battling the trolls and conspiracy theorists that push misinformation** and undermine the outbreak response*

Excerpt Apr 17 2020

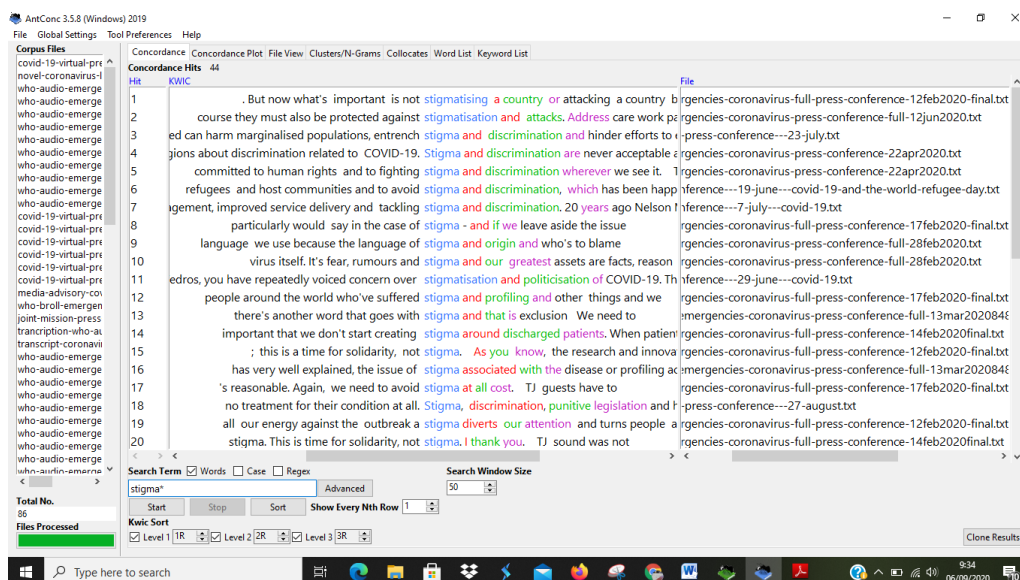
"We have been fighting this infodemic since the beginning. There's a lot of information that is out there that is inaccurate and we're working very hard to ensure that when someone

The description of handling how people spread inaccurate information as another war conveys a message on how the WHO has to handle more than just the disease itself, but must also provide accurate information to the public,

The other unseen enemy that is frequently described alongside fighting the Covid-19 is stigma. Stigma and stigmatisation have also appeared in few transcripts and is described as an enemy to fight. The concordance for word stigma* which results from all words of stigma and stigmatisation reaches 44 hits.

Transcript April 22, 2020

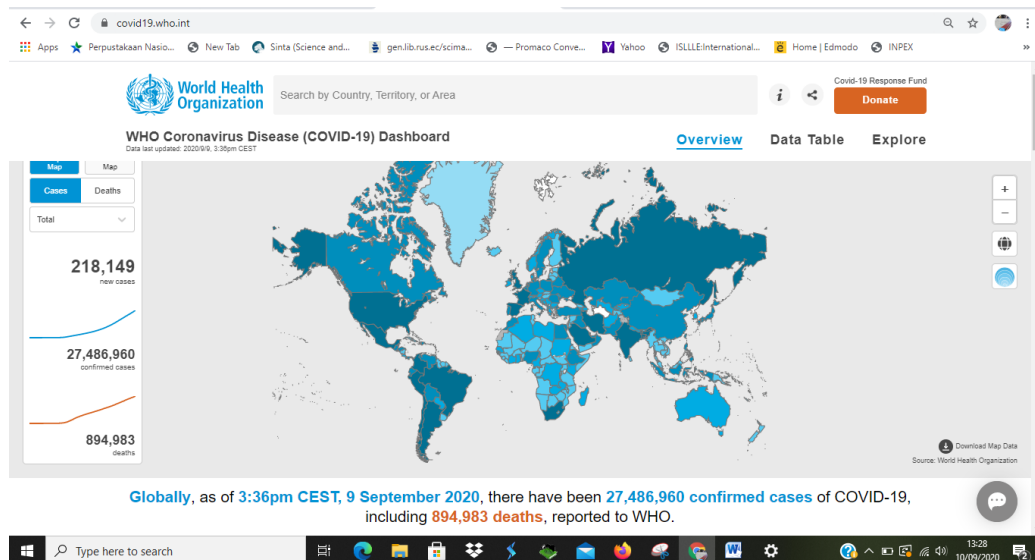
*There are disturbing reports in many countries, in all regions about discrimination related to COVID-19. **Stigma and discrimination are never acceptable anywhere at any time and must be fought in all countries.** As I have said many times, this is a time for solidarity, not stigma. WHO is also working actively to address the impacts of the pandemic on mental health.*



The extensive use of the WAR metaphor during the transcripts extends not only to refer to the disease as the enemy but also the infodemic, misinformation, and stigma.

The Decline of War Narrative

The decline of war narrative in metaphorical expressions does not mean that fight is over, as the number of infected people is still high. By September 10, 2020, there are in total 27,486,960 confirmed case as shown from the WHO dashboard below:



Situation by WHO Region

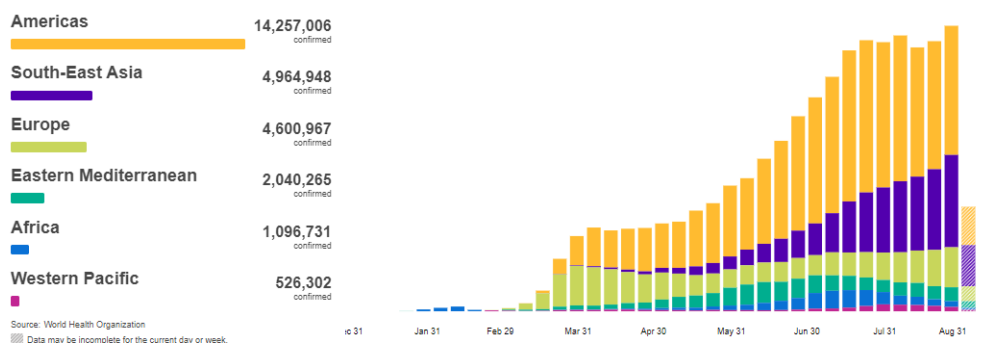


FIGURE 6. The screenshot of the WHO data dashboard on the covid-19 case development from February to August.

Although the highest frequency of war metaphor is during March and declining every month, it does not reflect the decrease of the case, but it implies the first stage of epidemic psychology. The fighting against Covid-19 is of course continuing, but in the later months, the less use of war metaphor suggests that the focus of discussion has shifted. It is worth continuing the examination of the same date to fit with the later stage of Strong's epidemic psychology (1990), which is the explanation and proposed action, by focusing on the corpora analysis that focuses on the Covid-19 communication on what needs to be done.

Conclusion

The use of war metaphor that reaches its peak in March 2020 is unavoidable during the first stage of pandemic and implied the fear and suspicion stage at the first appearance of a pandemic. After March, more have been known, and all countries seem to put the plan to fight for the disease in place, thus, in line with the third stage of the epidemic psychology, the action has been taken and the use of war metaphor declines. From the quantitative analysis of corpus from WHO transcript during February to August, March transcripts show the

highest use of war metaphor and send the implicit message of fear and panic as the first stage of epidemic psychology. The use of metaphor in discourse is not only a linguistics-level phenomenon, but it delivers beliefs and attitudes towards the topic. Further research shall be conducted to the shifting of the discourse within the framework of corpus linguistics analysis from the same data, and examine the shifting of the narratives.

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